



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R04-OAR-2010-0153; FRL-9682-3]

Approval and Promulgation of Implementation Plans and Designations of Areas for Air Quality Planning Purposes; Tennessee: Knoxville; Determination of Attaining Data for the 1997 Annual Fine Particulate Matter Standards and 2006 24-Hour Fine Particulate Standards

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing to make two determinations, one regarding the Knoxville, Tennessee, 1997 annual fine particulate (PM_{2.5}) nonattainment area and one regarding the Knoxville-Sevierville-La Follette, Tennessee, 2006 24-hour PM_{2.5} nonattainment area (both areas have the same geographic boundary and will hereafter be collectively referred to as the “Knoxville Area” or “Area”). First, EPA is proposing to determine that the Area has attained the 1997 annual average PM_{2.5} National Ambient Air Quality Standards (NAAQS or “standard”). Second, EPA is proposing to determine that the area has attained the 2006 24-hour PM_{2.5} NAAQS. These proposed determinations of attaining data are based upon complete, quality-assured and certified ambient air monitoring data for the 2009 - 2011 period, showing that the Area has monitored attainment of the 1997 annual PM_{2.5} NAAQS and 2006 24-hour PM_{2.5} NAAQS. If EPA finalizes these proposed determinations of attaining data, the requirements for the Area to submit attainment demonstrations and associated reasonably available control measures (RACM), reasonable further progress (RFP) plans, contingency measures, and other

planning state implementation plan (SIP) revisions related to attainment of the standards shall be suspended so long as the Area continues to attain the respective PM_{2.5} NAAQS.

DATES: Comments must be received on or before [insert date 30 days after date of publication in the Federal Register].

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R04-OAR-2010-0153, by one of the following methods:

1. www.regulations.gov: Follow the on-line instructions for submitting comments.
2. Email: R4-RDS@epa.gov.
3. Fax: (404) 562-9040.
4. Mail: EPA-R04-OAR-2010-0153, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303–8960.
5. Hand Delivery: Lynorae Benjamin, Chief, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303–8960. Such deliveries are only accepted during the Regional Office normal hours of operation, and special arrangements should be made for deliveries of boxed information. The Regional Office official hours of business are Monday through Friday, 8:30 to 4:30, excluding federal holidays.

Instructions: Direct your comments to Docket ID No. EPA-R04-OAR-2010-0153. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit through www.regulations.gov or e-mail, information that you consider to be CBI or otherwise protected. The www.regulations.gov website is an “anonymous access” system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through www.regulations.gov, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA’s public docket visit the EPA Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm>.

Docket: All documents in the electronic docket are listed in the www.regulations.gov index. Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in www.regulations.gov or

in hard copy at the Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. EPA requests that if at all possible, you contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 to 4:30, excluding federal holidays.

FOR FURTHER INFORMATION CONTACT: Sara Waterson or Joel Huey, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. Ms. Waterson may be reached by phone at (404) 562-9061 or via electronic mail at waterson.sara@epa.gov. Mr. Huey may be reached by phone at (404) 562-9104. Mr. Huey can also be reached via electronic mail at huey.joel@epa.gov.

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I. What Actions is EPA Taking?

EPA is proposing to determine that the Knoxville Area (comprised of Anderson, Blount, Knox, and Loudon Counties in their entireties and a portion of Roane County) have monitored attaining data for the 1997 annual and 2006 24-hour PM_{2.5} NAAQS. The proposal is based upon complete, quality-assured and certified ambient air monitoring data for the 2009 - 2011 monitoring period.

II. What is the Background for These Actions?

On July 18, 1997 (62 FR 36852), EPA established an annual PM_{2.5} NAAQS at 15.0 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) based on a 3-year average of annual mean PM_{2.5} concentrations. At that time, EPA also established a 24-hour NAAQS of 65 $\mu\text{g}/\text{m}^3$. *See* 40 CFR 50.7. On January 5, 2005 (70 FR 944), EPA published its air quality designations and classifications for the 1997 PM_{2.5} NAAQS based upon air quality monitoring data from those monitors for calendar years 2001 - 2003. These designations became effective on April 5, 2005. The Knoxville Area was designated nonattainment for the 1997 annual PM_{2.5} NAAQS. *See* 40 CFR 81.343.

On October 17, 2006 (71 FR 61144), EPA retained the 1997 annual PM_{2.5} NAAQS at 15.0 $\mu\text{g}/\text{m}^3$ based on a 3-year average of annual mean PM_{2.5} concentrations, and promulgated a

24-hour NAAQS of 35 $\mu\text{g}/\text{m}^3$ based on a 3-year average of the 98th percentile of 24-hour concentrations. The process for designating areas following promulgation of a new or revised NAAQS is contained in section 107(d)(1) of the Clean Air Act (CAA). EPA and state air quality agencies initiated the monitoring process for the $\text{PM}_{2.5}$ NAAQS in 1999 and began operating all air quality monitors by January 2001. On November 13, 2009, EPA published its air quality designations and classifications for the 2006 24-hour $\text{PM}_{2.5}$ NAAQS based upon air quality monitoring data from those monitors for calendar years 2006 - 2008 (74 FR 58688). Those designations became effective on December 14, 2009. The Knoxville Area was designated nonattainment for the 2006 24-hour $\text{PM}_{2.5}$ NAAQS (see 40 CFR part 81).¹

In response to legal challenges of the annual NAAQS promulgated in 2006, the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit) remanded this NAAQS to EPA for further consideration. *See American Farm Bureau Federation and National Pork Producers Council, et al. v. EPA*, 559 F.3d 512 (D.C. Cir. 2009). However, given that the 1997 and 2006 annual NAAQS are essentially identical, attainment of the 1997 annual NAAQS would also indicate attainment of the remanded 2006 annual NAAQS.

On April 25, 2007 (72 FR 20664), EPA promulgated its $\text{PM}_{2.5}$ implementation rule, codified at 40 CFR part 51, subpart Z, in which the Agency provided guidance for state and tribal plans to implement the 1997 $\text{PM}_{2.5}$ NAAQS. This rule, at 40 CFR 51.1004(c), specifies some of the regulatory consequences of attaining the NAAQS, as discussed below. While 40 CFR 51.1004(c) was promulgated as part of a set of regulations addressing the $\text{PM}_{2.5}$ NAAQS

¹ On February 3, 2011, EPA made a technical correction to the name of the Knoxville, Tennessee, nonattainment area included in the November 13, 2009 (74 FR 58688), Federal Register action designating nonattainment areas for the 2006 24-hour $\text{PM}_{2.5}$ NAAQS. The name of the Knoxville, Tennessee, nonattainment area for this NAAQS was changed at 40 CFR 81.343 to be the Knoxville-Sevierville-La Follette, Tennessee, nonattainment area to correspond with the name of the Core Based Statistical Area and to provide an accurate area name in the CFR. *See* 76 FR 6056, February 3, 2011. The geographic boundaries of the Knoxville-Sevierville-La Follette nonattainment area for the 24-hour $\text{PM}_{2.5}$ NAAQS are the same as for the Knoxville nonattainment area for the annual $\text{PM}_{2.5}$ NAAQS.

promulgated in 1997, EPA believes that the same approach is warranted with respect to the PM_{2.5} NAAQS promulgated in 2006. *See* “Implementation Guidance for the 2006 24-Hour Fine Particle (PM_{2.5}) National Ambient Air Quality Standards (NAAQS),” March 2, 2012, available online at http://www.epa.gov/ttn/naaqs/pm/pm25_guide.html.

III. Does the Knoxville Area Meet the 1997 Annual PM_{2.5} NAAQS?

A. Criteria

Today’s proposed rulemaking assesses whether the Knoxville Area has attained the 1997 annual PM_{2.5} NAAQS, based on the most recent three years of quality-assured data. Under EPA regulations at 40 CFR 50.7, the 1997 annual primary and secondary PM_{2.5} standards are met when the annual arithmetic mean concentration, as determined in accordance with 40 CFR part 50, Appendix N, is less than or equal to 15.0 µg/m³ at all relevant monitoring sites in the subject area.

B. Knoxville Area Air Quality

EPA has reviewed the ambient air monitoring data for the Knoxville Area in accordance with the provisions of 40 CFR part 50, Appendix N. All data considered have been quality-assured, certified, and recorded in EPA’s Air Quality System (AQS) database. The 2009 – 2011 data are used for the determination of attaining data because that is the most recent period of certified data available to EPA.

Table 1 and the related discussion below show that the Area is attaining the standard based on available data for 2009 – 2011. Less than 75 percent of the data were collected at the Bearden Middle School site for the second quarter of 2009 and the fourth quarter for 2010. EPA

performed a quarterly maximum data substitution test using 40 CFR part 50 Appendix N and the April 1999 *Guideline on Data Handling Conventions for the PM NAAQS* (www.epa.gov/ttncaaa1/t1/memoranda/pmfinal.pdf) for the Bearden Middle School monitor for the quarters with less than 75 percent complete data. Less than 75 percent of the data were collected at the Air Lab site for the first quarter of 2010. Coarse particulate matter (PM₁₀) data substitution, using the April 1999 *Guideline on Data Handling Conventions for the PM NAAQS* (www.epa.gov/ttncaaa1/t1/memoranda/pmfinal.pdf), was applied at the Air Lab site because a PM₁₀ sampler is co-located at the site. PM₁₀ data substitution was used instead of max value substitution because the substituted values were higher. The three-year annual design values both with and without data substitution are provided in Table 1 below. EPA's review of these data indicates that the Knoxville Area has met the 1997 annual PM_{2.5} NAAQS.

Table 1: 2009 - 2011 Annual Average PM_{2.5} Concentrations for Monitors in the Knoxville, Tennessee Nonattainment Area

Location	Site Number	Annual Average Concentration (µg/m ³) Without Data Substitution	Annual Average Concentration (µg/m ³) With Data Substitution
Sevier Elementary School	47-009-0011	11.0	N/A
Bearden Middle School	47-093-0028	11.6	12.4
Air Lab	47-093-1013	12.3	12.9
Rule High School	47-093-1017	12.1	N/A
Spring Hill Elementary School	47-093-1020	11.3	N/A
Webb Drive	47-105-0108	11.7	N/A

N/A- Not Applicable

The Bearden Middle School monitor has a preliminary 2009 – 2011 PM_{2.5} annual design value of 11.6 µg/m³. Since the monitor had incomplete quarters during the second quarter of 2009 and fourth quarter of 2010, quarterly maximum data substitution was conducted. The

annual mean was recalculated, and the resulting 2009 – 2011 PM_{2.5} annual design value with data substitution is 12.4 µg/m³. The Air Lab monitor has a preliminary 2009 – 2011 PM_{2.5} annual design value of 12.3 µg/m³. The monitor had one incomplete quarter during the first quarter of 2010, and PM₁₀ data substitution was conducted. The annual mean was recalculated, and the resulting 2009 – 2011 PM_{2.5} annual design value with data substitution is 12.9 µg/m³. Because the design values with data substitution are below the 15.0 µg/m³ standard, both monitors are considered to be attaining the 1997 annual NAAQS. The official design values of the monitors are 11.6 µg/m³ and 12.3 µg/m³, respectively. On the basis of this review, EPA is proposing to determine that the Knoxville Area has attained the 1997 annual PM_{2.5} NAAQS.

C. Has the Knoxville Area Met the 1997 Annual PM_{2.5} Air Quality Standard?

EPA has reviewed the ambient air monitoring data for PM_{2.5}, consistent with the requirements contained in 40 CFR part 50 and recorded the data in the EPA AQS database, for the Knoxville Area. Based on EPA's review of the data for 2009 – 2011, EPA proposes to determine that the Area attained the 1997 annual PM_{2.5} NAAQS.

IV. Does the Knoxville Area Meet the 2006 24-Hour PM_{2.5} NAAQS?

A. Criteria

Today's proposed rulemaking assesses whether the Knoxville Area has attained the 2006 24-hour PM_{2.5} NAAQS, based on the most recent three years of quality-assured data. Under EPA regulations at 40 CFR 50.13, the 2006 24-hour primary and secondary PM_{2.5} standards are met when the 98th percentile 24-hour concentration, as determined in accordance with 40 CFR part 50, Appendix N, is less than or equal to 35 µg/m³ at all relevant monitoring sites in the

subject area.

B. Knoxville Area Air Quality

EPA has reviewed the ambient air monitoring data for the Knoxville Area in accordance with the provisions of 40 CFR part 50, Appendix N. All data considered have been quality-assured, certified, and recorded in EPA's AQS database. The 2009 – 2011 data are used for the determination of attaining data because that is the most recent period of certified data available to EPA.

Table 2 and the related discussion below show that the Area is attaining the standard based on available data for 2009 – 2011. Less than 75 percent of the data were collected at the Bearden Middle School site for the second quarter of 2009 and the fourth quarter for 2010. EPA performed a quarterly maximum data substitution test using 40 CFR part 50 Appendix N and the April 1999 *Guideline on Data Handling Conventions for the PM NAAQS* (www.epa.gov/ttncaaa1/t1/memoranda/pmfinal.pdf) for the Bearden Middle School monitor for the quarters with less than 75 percent complete data. Less than 75 percent of the data were collected at the Air Lab site for the first quarter of 2010. Coarse particulate matter (PM₁₀) data substitution, using the April 1999 *Guideline on Data Handling Conventions for the PM NAAQS* (www.epa.gov/ttncaaa1/t1/memoranda/pmfinal.pdf), was applied at the Air Lab site because a PM₁₀ sampler is co-located at the site. PM₁₀ data substitution was used instead of max value substitution because the substituted values were higher. The three-year annual design values both with and without data substitution are provided in Table 2 below. EPA's review of these data indicates that the Knoxville Area has met the 2006 24-hour PM_{2.5} NAAQS.

Table 2: 2009 - 2011 24-hour Average PM_{2.5} Concentrations for Monitors in the Knoxville, Tennessee Nonattainment Area

Location	Site Number	Annual Average Concentration (µg/m³) Without Data Substitution	Annual Average Concentration (µg/m³) With Data Substitution
Sevier Elementary School	47-009-0011	21	N/A
Bearden Middle School	47-093-0028	24	27
Air Lab	47-093-1013	24	29
Rule High School	47-093-1017	24	N/A
Spring Hill Elementary School	47-093-1020	23	N/A
Webb Drive	47-105-0108	24	N/A

N/A- Not Applicable

The Bearden Middle School monitor has a preliminary 2009 – 2011 PM_{2.5} 24-hour design value of 24 µg/m³. Since the monitor had incomplete quarters during the second quarter of 2009 and fourth quarter of 2010, quarterly maximum data substitution was conducted. The 24-hour mean was recalculated, and the resulting 2009 – 2011 PM_{2.5} 24-hour design value with data substitution is 27 µg/m³. The Air Lab monitor has a preliminary 2009 – 2011 PM_{2.5} 24-hour design value of 24 µg/m³. The monitor had one incomplete quarter during the first quarter of 2010, and PM₁₀ data substitution was conducted. The 24-hour mean was recalculated, and the resulting 2009 – 2011 PM_{2.5} 24-hour design value with data substitution is 29 µg/m³. Because the design values with data substitution are below the 35 µg/m³ standard, both monitors are considered to be attaining the 2006 24-hour NAAQS. The official design values of the monitors are 24 µg/m³ and 24 µg/m³, respectively. On the basis of this review, EPA is proposing to determine that the Knoxville Area has attained the 2006 24-hour PM_{2.5} NAAQS.

C. Has the Knoxville Area Met the 2006 24-Hour PM_{2.5} Air Quality Standard?

EPA has reviewed the ambient air monitoring data for PM_{2.5}, consistent with the requirements contained in 40 CFR part 50 and recorded the data in the EPA AQS database, for the Knoxville Area. Based on EPA's review of the data for 2009 – 2011, EPA proposes to determine that the Area attained the 2006 24-hour PM_{2.5} NAAQS.

V. What is the Effect of These Actions?

If these proposed determinations of attaining data are made final, the requirements for the Knoxville Area to submit attainment demonstrations and associated RACM, RFP plans, contingency measures, and any other planning SIPs related to attainment of either the 1997 annual or the 2006 24-hour PM_{2.5} NAAQS would be suspended for so long as the Area continues to attain the applicable PM_{2.5} NAAQS. *See* 40 CFR 51.1004(c). Notably, as described below, any such determination would not be equivalent to the redesignation of the Area to attainment for the 1997 annual or 2006 24-hour PM_{2.5} NAAQS.

If these proposed rulemakings are finalized and EPA subsequently determines, after notice-and-comment rulemaking in the Federal Register, that the Area has violated either the 1997 annual or 2006 24-hour PM_{2.5} NAAQS, the basis for the suspension of the specific requirements would no longer exist for the Knoxville Area for the NAAQS (i.e, the 1997 annual or the 2006 24-hour NAAQS) which was violated, and the Area would thereafter have to address the applicable requirements for that particular NAAQS. *See* 40 CFR 51.1004(c).

Finalizing these proposed actions would not constitute a redesignation of the Area to attainment of the 1997 annual or 2006 24-hour PM_{2.5} NAAQS under section 107(d)(3) of the CAA. Further, finalizing these proposed actions does not involve approving a maintenance plan

for the Area as required under section 175A of the CAA, nor would it find that the Area has met all other requirements for redesignation. Even if EPA finalizes the proposed actions, the designation status of the Knoxville Area would remain nonattainment for the 1997 annual and 2006 24-hour PM_{2.5} NAAQS until such time as EPA determines that the Area meets the CAA requirements for redesignation to attainment and takes action to redesignate the Area.

If the Knoxville Area continues to monitor attainment of the 1997 annual PM_{2.5} NAAQS, the requirements for the Knoxville Area to submit an attainment demonstration and associated RACM, RFP plan, contingency measures, and any other planning SIPs related to attainment of the 1997 annual PM_{2.5} NAAQS will remain suspended. Further, if the Knoxville Area continues to monitor attainment of the 2006 24-hour PM_{2.5} NAAQS, the requirements for the Knoxville Area to submit an attainment demonstration and associated RACM, RFP plan, contingency measures, and any other planning SIPs related to attainment of the 2006 24-hour PM_{2.5} NAAQS will remain suspended.

VI. Statutory and Executive Order Reviews

These actions propose to make determinations of attaining data based on air quality, and would, if finalized, result in the suspension of certain federal requirements, and it would not impose additional requirements beyond those imposed by state law. For that reason, these proposed actions:

- are not “significant regulatory actions” subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- do not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);

- are certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- do not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- do not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- are not economically significant regulatory actions based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- are not significant regulatory actions subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- are not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- do not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994). In addition, these proposed 1997 annual and 2006 24-hour PM_{2.5} NAAQS determinations for the Knoxville Area do not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the state, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

For purposes of judicial review, the two determinations proposed by today's action are severable from one another.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Particulate matter, Reporting and Record-keeping requirements.

Authority: 42 U.S.C. 7401 et seq.

Dated: May 17, 2012

A. Stanley Meiburg,

Acting Regional Administrator,

Region 4.

